

Applic. No.: 09/997,981

Amdt. Dated April 7, 2005

Reply to Office action of February 7, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claim 1 (previously presented). A device for synchronizing processes which run on a plurality of units including a central unit linked with other units via a field bus, comprising:

a device provided in the central unit for producing a system clock;

a vacant line provided in the field bus for distributing said system clock to the other units;

a clock generator or transmitter provided in the other units; and

respective multiplication devices located at the other units for multiplying said system clock.

Claim 2 (original). The device for synchronizing processes according to claim 1, wherein said system clock serves for determining at least one value of a machine including

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rotational speed, acceleration, and angular position of the machine.

Claim 3 (original). The device for synchronizing processes according to claim 2, wherein said at least one determined value is feedable to the further units by a bus system.

Claim 4 (original). The device for synchronizing processes according to claim 1, wherein said multiplication devices have a filtering device.

Claim 5 (original). The device for synchronizing processes according to claim 1, wherein said multiplication devices have a device for recognizing an absolute time check.

Claim 6 (original). The device for synchronizing processes according to claim 1, wherein said multiplication devices have a quartz-stabilized frequency generator.

Claim 7 (original). The device for synchronizing processes according to claim 2, wherein said multiplication devices serve for producing a module clock for processes taking place in the other units.

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Claim 8 (original). The device for synthesizing processes according to claim 7, wherein said module clock is adjustable in accordance with the process taking place in the respective other units.

Claim 9 (original). The device for synthesizing processes according to claim 3, wherein said bus system for distributing said system clock is a local bus system.

Claim 10 (currently amended). A method of synchronizing processes which run on a central unit and on other units, which comprises:

generating a system clock in the central unit;

generating module clocks in the other units; and

providing the system clock, which has been produced in the central unit, for synchronizing the module clock which has been produced in the other units; and

at regular intervals, synchronizing the other units to an absolute time.

Claim 11 (canceled).

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Claim 12 (original). The method according to claim 10, which includes applying the module clock present in the units, which are involved, for processes taking place therein.

Claim 13 (original). The method according to claim 10, which includes, upon failure of the system clock, driving down the processes led by the module clock, which are conducted through the further involved units.

Claim 14 (original). The method according to claim 10, which includes adjusting the frequency of the module clock in accordance with an operation being performed thereat.

Claim 15 (original). The method according to claim 10, which includes determining values of a machine, such as rotational speed, acceleration, and angular position simultaneously with the system clock.

Claim 16 (original). The method according to claim 10, which includes forwarding the determined values together with the determined instant of time to the other units.

Claim 17 (original). The method according to claim 10, which includes determining the values of the machine by a

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mathematical model in the involved units after the transmission via the central unit for the time-duration until the transmission of the next current values.

Claim 18 (original). The method according to claim 10, which includes transmitting an absolute time from a central computer unit to involved computer units, after a defined number of subdivided system clocks.